Syllabus MSNE 451/450 MATERIALS SCIENCE SEMINAR

Description: Seminars on various topics in materials science & engineering
Degree plan: 451 is required for the BS in MSNE, 450 is recommended
Credits: 451: 1 semester hour, 450: 0 semester hour
Grade Mode: Satisfactory/Unsatisfactory. No credit is earned for Unsatisfactory performance.
Instructor: Robert Vajtai, **office:** MEB 218 **email:** robert.vajtai@rice.edu
Textbook and other course materials: none
Prerequisites and Co-requisites: none
Goals for this course: (A) to familiarize students with subjects related to materials science and engineering which are of current interest and which are beyond those covered in their coursework and (B) to stimulate some thought by the students regarding their own professional goals and interests.

Each semester there will be approximately twelve MSNE department seminars. Date, time, and location are announced through Web page msne.rice.edu under the Events tab and occasionally by email. It is the responsibility of the student to find that information and schedule their activities accordingly. An MSNE department administrator will take attendance, and it is the responsibility of each student in attendance to find either the administrator or Instructor and make sure their attendance is recorded. Attendance at each seminar, for its entirety, counts as one point.

Attendance points are also earned as follows: two points = local chapter meeting, or three points = national conference, sponsored by any of the professional societies listed below.

MSNE 451 students are required to join a materials-related professional society. Acceptable ones include ASM, TMS, ACerS, AIST, MRS, AWS, ASTM, NACE, Material Advantage, and others approved in advance by Instructor. This expense, within limits, will be reimbursed once the student fills out an expense report, attaches a proper receipt, and turns it in at the MSNE office or to Instructor. Some limited expenses for travel and meals off-campus, related to chapter meetings or conferences, may also be reimbursed. All such reimbursements must be per university policies and procedures. Limits will be established by the department each semester and announced by Instructor.

For each presentation attended students will turn in a brief report which includes: (1) the name and affiliation of the primary speakers and the title of their presentations, (2) a summary of any hypotheses and conclusions presented, (3) a statement of the student's own professional career goals or interests, (4) a discussion of the relevance or irrelevance of the presentation to the student's goals or interests. Reports should each be about 60 to 120 words long.

In order to earn a Satisfactory grade for the semester, attendance points must equal or exceed the following: MSNE 450 = 40% and MSNE 451 = 80% of the number of MSNE department seminars during the semester; and, at least 80% of the written reports must also be Satisfactory.

This course is intended to address ABET General Criterion 3. Student Outcomes:
(h) the broad education necessary to understand the impact of engineering solutions …
(i) a recognition of the need for, and an ability to engage in life-long learning
(j) a knowledge of contemporary issues

Any student with a disability requiring accommodations in this class is encouraged to contact the instructor after class or during office hours. Additionally, students should contact the coordinator for Disabled Student Services in Allen Center.

Syllabus MSNE 500 MATERIALS SCIENCE SEMINAR

Description: Seminars on various topics in materials science and nanoengineering

Degree plan: required for the MS and PhD in MSNE

Credits: 1 semester hour, Repeatable for Credit

Grade Mode: Satisfactory/Unsatisfactory.
No credit is earned for Unsatisfactory performance.

Instructor: Robert Vajtai, **office:** MEB 218 **email:** robert.vajtai@rice.edu

Textbook and other course materials: none

Prerequisites and Co-requisites: none

Goals for this course:

(A) to familiarize students with subjects related to materials science and nanoengineering which are of current interest and which are beyond those covered in their coursework and

(B) to stimulate some thought by the students regarding their own professional goals and interests.

Each semester there will be approximately twelve MSNE department seminars. Date, time, and location are announced through Web page msne.rice.edu under the Events tab and usually by email. It is the responsibility of the student to find that information and schedule their activities accordingly.

Attendance and Grading Policy: A department administrator will take attendance. It is the responsibility of each student to find either the administrator or Instructor and make sure their attendance is recorded. To earn a Satisfactory grade for the semester, attendance must equal or exceed the following fraction of seminars during the semester. MS degree: 50% and PhD degree: 75%.

Any student with a disability requiring accommodations in this class is encouraged to contact the instructor after class or during office hours. Additionally, students should contact the coordinator for Disabled Student Services in Allen Center.